

California Energy Commission

STAFF REPORT

LOCALIZED HEALTH IMPACTS REPORT

Addendum 9 for a Selected Project With Location Changes
Awarded Funding Through the Alternative and Renewable
Fuel and Vehicle Technology Program Under Solicitation
PON-11-602 – Alternative Fuels Infrastructure: Electric,
Natural Gas, Propane, E85, and Diesel Substitutes
Terminals



CALIFORNIA
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ADDENDUM 9

The *Localized Health Impacts (LHI) Report for this Selected Project Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation PON-11-602, Advanced Vehicle Technology Manufacturing* was posted September 21, 2012.¹ This addendum applies the same localized health impacts assessment method. Additional project descriptions for the original locations were provided in Addendum 2, posted November 29, 2012.²

RTC Fuels, LLC dba Pearson Fuels, has proposed new site locations for the “19 Pearson Fuels E85 Stations.” Table 1 lists the original and new station locations along with the environmental justice (EJ) indicators. EJ indicators are assessed and represented on Table 3. The *LHI* assessment method is further explained and located in the appendix.

Table 1: Proposed Site Changes for E85 Station Locations

Original Site Location	Environmental Justice (EJ) Indicators for the Original Location	New Site Location	EJ Indicators for New Location
350 Encinitas Boulevard, Encinitas, California 92024	None	2592 South Cherry Avenue, Fresno, California 93706	Poverty, Unemployment, Minority, and Age
15051 Rogers Road, Patterson, California 94538	Minority, Unemployment, and Age	4707 First Street, Livermore, California 94551	None
890 Alma Real, Pacific Palisades, California 90272	*Age	5703 Gage Avenue, Bell Gardens, California 90201	Poverty, Unemployment, Minority, and Age

Source: Energy Commission staff analysis

*Original EJ indicator location analysis was based on Los Angeles County, and was not specific to Pacific Palisades. This addendum has been updated to reflect the actual EJ indicators for Pacific Palisades.

1 Baronas, Jean, 2012. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2012-004.

2 Williams, Sarah, 2012. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2012-004-AD2.

Bell Gardens and Fresno site locations have four EJ indicators,³ and Livermore has none, as shown in Table 1. All three locations have nonattainment status for ozone, particulate matter⁴ (PM) 2.5, and PM 10. With more than two EJ indicators, the Bell Gardens and Fresno sites are both in high-risk communities.

The three replacement locations will result in new surroundings, as shown in Table 2.

Table 2: Surroundings for the New Site Locations

New Address	Surroundings (within a 1-mile radius)
2592 South Cherry Avenue, Fresno, California 93706	5 schools, no day care centers, and 3 medical offices/hospitals
4707 First Street, Livermore, California 94551	4 schools, 3 day care centers, and 3 medical offices/hospitals
5703 Gage Avenue, Bell Gardens, California 90201	8 schools, 3 day care centers, and 6 medical offices/hospitals

The anticipated gasoline gallon equivalent (GGE) displacement for each replacement location is 185,603 GGE and is the same as the original locations.

3 The EJ indicators follow: (i.) minority subset represents more than 30 percent of a given city's population (2010), (ii.) city's poverty exceeds California's poverty level of 15.9 percent (2009-2013), (iii.) city's unemployment rate exceeds California's unemployment rate of 6.3 percent as of June 2015, and (iv.) city's percentage of persons younger than 5 years of age or older than 65 years of age is 20 percent higher than then California's average. Note: For the entire state, the percentage of persons under the age of 5 years is 6.8 percent, and the percentage of persons over the age of 65 years is 11.4 percent.

4 "Particulate matter" is unburned fuel particles that form smoke or soot and stick to lung tissue when inhaled, and a chief component of exhaust emissions from heavy-duty diesel engines.

Location Analysis and Community Impacts

Based on the staff's assessment of the proposed station locations, it is expected that none of the surrounding communities will be disproportionately impacted by installation of the projects. While overall air quality depends on a number of factors, the Energy Commission expects that air quality will improve over time due to the majority of E85 that will be dispensed at the stations will be replacing California reformulated (RFG) gasoline. Replacing California RFG with E85 will decrease the area criteria pollutants and toxic air contaminants, which will benefit all surrounding communities, especially those at risk.

Location analysis and community impacts are based on comparing the projects location demographics to that of California, as indicated in Table 3. Although Table 3 does indicate cities with EJ indicators, the projects will not result in elevated risks. The proposed stations will reduce emissions, exposure, and health risks at local levels, resulting in benefits.

Table 3: Demographics and Environmental Justice (EJ) Indicators Compared With the State of California (Yellow highlighted areas indicate numbers that meet the definition for EJ Indicators.)

	Persons Below Poverty Level (2009-2013)	Black Persons (2010)	American Indian and Alaska Native (2010)	Persons of Hispanic or Latino Origin (2010)	Asian (2010)	Persons Under 5 Years of Age (2010)	Persons Over 65 Years of Age (2010)	Unemployment Rate (June 2015)
California	15.9%	6.2%	1.0%	37.6%	13.0%	6.8%	11.4%	6.3%
	>15.9%	>30.0%	>30.0%	>30.0%	>30.0%	>8.16%	>13.8%	>6.3%
Fresno	28.9%	8.3%	1.7%	46.9%	12.6%	8.9%	9.3%	10.3%
Livermore	5.7%	2.1%	0.6%	20.9%	8.4%	6.6%	10.3%	3.1%
Bell Gardens	27.6%	.09%	1.1%	95.7%	0.6%	9.3%	5.2%	8.4%

Sources: Unemployment information from the State of California, Employee Development Department (EDD) Labor Market Information Division: http://www.labormarketinfo.edd.ca.gov/CES/Labor_Force_Unemployment_Data_for_Cities_and_Census_Areas.html and Demographics information from the U.S. Department of Commerce, U.S. Census Bureau: <http://quickfacts.census.gov/qfd/states/06/0683668.html>

Summary

The three proposed project locations are anticipated to impact each city positively due the majority of the E85 that will be dispensed from the stations. The E85 will replace California RFG gasoline that would be otherwise transported and burned within the same localized air shed.

APPENDIX A:

Localized Health Impact Report Assessment Method

Based on the California Energy Commission's interpretation of the *California ARB AQIP Guidelines*, this *LHI Report* assesses the potential impacts to communities as a result of the projects proposed by the ARFVTP. This report is prepared under the *California ARB AQIP Guidelines, California Code of Regulations, Title 13, Motor Vehicles, Chapter 8.1 (CCR § 2343)*:

“(6) Localized health impacts must be considered when selecting projects for funding. The funding agency must consider environmental justice consistent with state law and complete the following:

(A) For each fiscal year, the funding agency must publish a staff report for review and comment by the public at least 30 calendar days prior to approval of projects. The report must analyze the aggregate locations of the funded projects, analyze the impacts in communities with the most significant exposure to air contaminants or localized air contaminants, or both, including, but not limited to, communities of minority populations or low-income populations, and identify agency outreach to community groups and other affected stakeholders.

(B) Projects must be selected and approved for funding in a publicly noticed meeting.”

This *LHI Report* is not intended to be a detailed environmental health impact analysis of proposed projects nor is it intended to substitute for the environmental review conducted during the California Environmental Quality Act (CEQA) review. This *LHI Report* includes staff application of the Environmental Justice Screening Method (EJSM) to identify projects located in areas with social vulnerability indicators and the greatest exposure to air pollution and associated health risks.⁵

The EJSM was developed to identify low-income communities highly affected by air pollution for assessing the impacts of climate change regulations, specifically Assembly Bill 32 (Núñez, Chapter 488, Statutes of 2006), the California Global Warming Solutions Act of 2006. The EJSM integrates data on (i.) exposure to air pollution, (ii.) cancer risk, (iii.) ozone concentration, (iv.) frequency of high ozone days, (v.) race/ethnicity, (vi.) poverty level, (vii.) home ownership, (viii.) median household value, (ix.) educational attainment, and (x.) sensitive populations (populations under 5 years of age or over 65 years of age).

5 California Air Resources Board (ARB). *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*, 2010. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

- To determine high risk communities, environmental justice (EJ) indicators for locations of the E85 stations are compared to data from the U.S. Department of Census or other public agency. Staff identifies high-risk communities by using a two-part standard. For a community to be considered high- risk, for this assessment, it must meet both Parts 1 and 2 of this standard.

Part 1:

- Communities located in nonattainment air basins for ozone, PM 10 or PM 2.5

Part 2:

- Communities having more than one of the following EJ indicators: (1) minority, (2) poverty, (3) unemployment and/or (4) high percentage of population under 5 years of age and over 65 years of age. The EJ indicators follow:
 - A minority subset represents more than 30 percent of a given city's population. (MINORITY)
 - A city's poverty level exceeds California's poverty level. (POVERTY)
 - A city's unemployment rate exceeds California's unemployment rate. (UNEMPLOYMENT)
 - The percentage of people living in that city are younger than 5 years of age or older than 65 years of age is 20 percent higher than the average percentage of persons under 5 years of age or over 65 years of age for all of California. (SENSITIVE POPULATIONS – AGE)